20.XX.201.170 – SIGNS & LIGHTING REHABILITATION PROGRAM

Goals

Reduce the backlog of signs needing rehabilitation by replacing aging sign inventories and upgrading sign to current standards.

Reduce the maintenance effort and expenditures for lighting systems by retrofitting with technology that improves energy efficiency and/or reducing the effort required maintaining lighting systems.

Qualifications

Signs

1. Conversion of guide signs to retro-reflective sheeting

Lighting

- 1. Conversion of series circuits to parallel circuits
- 2. Upgrade lamp technology: mercury vapor to high pressure sodium (HPS) for street lighting; fluorescent/mercury vapor to inductive lamp for sign lighting

Where feasible, it is recommended that the signing and lighting needs be met through incorporation into capital improvement projects.

Performance Measures

The statewide goal is to rehabilitate 25,000 signs and 27,000 lighting fixtures from 2006/07 through 2015

Priorities

- 1. Conversion of series circuits to parallel circuits
- 2. Upgrade lamp technology
- 3. Conversion of guide signs to retro-reflective sheeting

Outcome

Improve user's visibility at intersections, freeway ramps, tunnels, and of signs resulting in reduced traffic collisions and reduced user's driving stress.

20.XX.201.310 - OPERATIONAL IMPROVEMENTS PROGRAM

Goals

Reduce traffic congestion and associated traffic collisions through improvements addressing operational deficiencies at spot locations without expanding design capacity.

Qualifications

Section 13 of the California Transportation Commission's State Transportation Improvement Program (S Guidelines provides examples of eligible projects such as auxiliary lanes, slow vehicle lanes, turnouts, horizontal and vertical alignment corrections, shoulder widening, intersection modifications including traffi signals, two-way left turn lanes, and channelization.

The project's benefit-to-cost ratio should be at least 1:1 [Project Index Number (PIN) greater than 100]. Project benefits include those as the result of increased speeds and reduced traffic collisions.

Performance Measures

The statewide goal is to reduce 60,000 thousand vehicle-hours per year of recurring delay in the 2015/16 after ten years of investment from 2006/07 through 2015/16. District goals are based on the district percentage of statewide vehicle miles of travel on the State Highway System.

Priorities

Districts should define current system performance, deficiencies or bottlenecks, and corridor priorities through system planning and system management analyses. For freeway segments reported by the High Congestion Monitoring Program (HICOMP), statewide priorities are established using the HICOMP congestion value in terms of vehicle-hours of delay per day per mile and district priorities. For Non-HICO segments, statewide priorities are established using the volume to capacity ratio (V/C) and district priorit

Outcomes

Reduced trip time and improved trip reliability.

20.XX.201.315 - TRANSPORTATION MANAGEMENT SYSTEMS PROGRA

Goals

Reduce traffic congestion and associated traffic collisions through system management techniques.

Qualifications

Section 11 of the California Transportation Commission's State Transportation Improvement Program (S Guidelines defines eligible projects as transportation management centers (TMC) including necessary computer software and hardware; TMC interconnect projects; and field elements such as, but not limited traffic sensors, message signs, ramp meters, and cameras.

Performance Measures

The statewide goal is to add 8,600 field elements and 1,725 miles of fiber to the system from 2006/07 thr 2015/16. Districts will be provided with goals for field elements and miles of fiber.

Priorities

Districts should define current system performance, deficiencies or bottlenecks, and corridor priorities through system planning and system management analyses. The Transportation Management System Management plan assigns priorities for field element deployment in congested areas and for basic detection and traffic control. An emphasis is to be placed on detector stations.

For freeway segments reported by the Highway Congestion Monitoring Program (HICOMP), statewide priorities are established using the HICOMP congestion value in terms of vehicle-hours of delay per day per mile and district priorities. For Non-HICOMP segments, statewide priorities are established using the voto capacity ratio (V/C) and district priorities.

TMC's will be evaluated on a case-by-case basis.

Outcomes

Reduced trip time and improved trip reliability.

20.XX.201.321 - WEIGH STATIONS AND WEIGH-IN-MOTION PROGRAM

Goals

Reduce the amount of pavement damage due to overweight trucks and reduce traffic collisions involving trucks.

Qualifications

Only new sites or major upgrades to existing sites identified in the 2004 Commercial Vehicle Enforcement Facility (CVEF) Inventory of Needs will be considered. Any additional sites must first be incorporated into inventory of needs.

The enforcement facilities are commonly referred to as "weigh stations" though safety and other enforcement facilities are performed by the California Highway Patrol and other State agencies.

The WIM sites provide data for federally required data systems and special studies, design and maintena strategies, size and weight policies, enforcement and planning strategies, and the traffic and truck volume publications. These are funded through a Minor Program Reservation in the SHOPP.

Performance Measures

Weigh stations (new or major upgrades) should be constructed on a timeline of two weigh stations every years. This results in a statewide goal of 6 projects programmed from 2006/07 through 2015/16.

Priorities

Project priorities are reflected in the timeline of project actions in the 20 CVEF Inventory of Needs.

Outcomes

Reduced user vehicle maintenance costs and reduced traffic collisions involving trucks.

20.XX.201.322 - TRANSPORTATION PERMIT REQUIREMENTS FOR BRIDGES PROGRAM

Goals

Upgrade low and weak bridges to allow safe and efficient movement of oversize/overweight (extra-legal) vehicles and loads on major State highways.

Qualifications

Structures meeting the following criteria:

- ? Transportation engineer permit writer experience of structures that increase circuitous routing of extra-l vehicles and loads
- ? Frequency and length of detouring of extra-legal vehicles and loads
- ? Highway classification (Interstate, National Highway System, etc)
- ? Frequency of permitted extra-legal vehicles and loads
- ? Truck annual average daily traffic (AADT)
- ? Minimum mandatory vertical clearance for structures after new overlay or pavement rehabilitation::

Freeways and expressways – 16'1" high and 'bonus purple" 9-axle load

Conventional highways – 15'1" high and "bonus purple" 9-axle load

Structures with a history of being struck by extra-legal vehicles and loads shall be considered for the highpriority category.

Qualifying structures should be upgraded to provide vehicles with extra-legal loads direct movement along route and ramps shall be improved to provide access for these vehicles to freeways.

For structures with vertical clearances equal to or less than 15 feet 6 inches, install warning signs stating to vertical clearance.

Performance Measures

The statewide goal is to upgrade 95 structures from 2006/07 through 2015/16.

For the signing of vertical clearances, the statewide goal is to sign 740 structures.

Priorities

A priority list of structures will be provided to the districts.

Outcomes

Reduced trip time for extra-legal vehicles and loads and reduced number of collisions of an extra-legal $v\varepsilon$ and load with a structure.